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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/658,446	09/08/2003	Michael J. Sullivan	B03-58	4732

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EXAMINER	
HUNTER, ALVIN A	

ART UNIT	PAPER NUMBER
3711	

DATE MAILED: 05/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/658,446	SULLIVAN ET AL.	
	Examiner	Art Unit	
	Alvin A. Hunter	3711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 March 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,7-10 and 13-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,7-10 and 13-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 7, 10, and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi et al. (USPN 6117026) in view of Hwang (USPN 5952415).

Regarding claim 1, Hayashi et al. discloses a golf ball having a core comprising an elastomeric composition of a diene, a reactive co-agent, and a crosslinking agent, wherein the reactive co-agent is present in about 5 phr by weight, an intermediate layer made of a thermoplastic polymer, a cover, and a thin dense layer disposed between the intermediate layer and the cover, wherein the thin dense layer has a thickness of 0.3 to 2.5mm (See Figure 1 and Columns 2 through 4). One having ordinary skill in the art would have found it obvious to have the reactive co-agent of any value in order to obtain the resilience desired by the artisan. Hayashi et al. does not disclose the core have about 0 phr by weight of reactive co-agent and does not teach away from having any other amount. Hwang discloses a core for a multi piece golf ball wherein the core comprises about 0 phr by weight of a reactive co-agent (See Column 2, lines 7 through 12). One having ordinary skill in the art would have found it obvious to have about 0 phr by weight of reactive co-agent, as taught by Hwang, in order to optimize the resilience of the golf ball.

Regarding claim 7, being that the above meets the structure of claim 1, the thin dense layer would naturally not appreciably affect the overall ball properties of feel, compression, and cover hardness.

Regarding claims 10 and 13, Hayashi et al. discloses a golf ball having a core comprising an elastomeric composition of a diene, a reactive co-agent, and a crosslinking agent, wherein the reactive co-agent is present in about 5 phr by weight, an intermediate layer made of a thermoplastic polymer, a cover, and a thin dense layer disposed between the intermediate layer and the cover, wherein the thin dense layer has a thickness of 0.3 to 2.5mm (See Figure 1 and Columns 2 through 4). One having ordinary skill in the art would have found it obvious to have the reactive co-agent of any value in order to obtain the resilience desired by the artisan. Hayashi et al. does not disclose the core have about 0 phr by weight of reactive co-agent and does not teach away from having any other amount. Hwang discloses a core for a multi piece golf ball wherein the core comprises about 0 phr by weight of a reactive co-agent (See Column 2, lines 7 through 12). One having ordinary skill in the art would have found it obvious to have about 0 phr by weight of reactive co-agent, as taught by Hwang, in order to optimize the resilience of the golf ball. The applicant claims the Atti compression being 10-60, wherein the value of 60 is equivalent to approximately 3.8mm under a deflection load of 100kg. Hayashi et al. discloses the core of having a deflection of at least 3.5mm. Further, Hayashi et al. also notes that the addition of fillers to the core are optional for adjusting the specific gravity wherein the amount of filler may be 0. Therefore, it is believed that the specific gravity claimed by the applicant is naturally met

by Hayashi et al. being that the materials disclosed by Hayashi et l. are the same as than being claimed by the applicant.

Regarding claim 14, Hayashi et al. discloses the reactive co-agent being a metal salt of a monomethacrylate (See Column 2, lines 54 through 67).

Regarding claim 15, Hayashi et al. discloses the metal being selected from zinc or magnesium.

Regarding claim 16, being that the above meets the structure of claim 1, the thin dense layer would naturally not appreciably affect the overall ball properties of feel, compression, and cover hardness.

Claims 8, 9, 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi et al. (USPN 6117026) in view of Hwang (USPN 5952415) further in view of Higuchi et al. (USPN 6129640).

Regarding claim 8, 9, 17, and 18, Hayashi et al. in view of Hwang does not disclose the specific gravity of the thin dense layer. Higuchi et al. discloses a multi piece golf ball having a thin dense layer (intermediate layer) with a specific gravity of 1.1 to 2.0 (See Columns 3 and 4). One having ordinary skill in the art would have found it obvious to have the thin dense layer taught by Hayashi et al. in view of Hwang, within the above value, as taught by Higuchi et al., in order to improve the spin characteristics of the golf ball.

Response to Arguments

Applicant's arguments with respect to claims 1, 7-10, and 13-18 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alvin A. Hunter whose telephone number is (571) 272-4411. The examiner can normally be reached on Monday through Friday from 7:30AM to 4:00PM Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Kim, can be reached on 571-272-4463. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AAH
Alvin A. Hunter, Jr.

STEPHEN BLAU
PRIMARY EXAMINER